



# UNITED STATES PATENT AND TRADEMARK OFFICE

*M*  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/889,263   | 10/16/2001  | Takemi Aonuma        | HIRA1180            | 1422             |
| 7590   | 03/11/2004  |                      | EXAMINER            |                  |
| Gray Cary Ware Freidenrich<br>Suite 1600<br>4365 Executive Drive<br>San Diego, CA 92121-2189 |             |                      | MARX, IRENE         |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1651                |                  |

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                  |
|------------------------------|------------------------|------------------|
| <b>Office Action Summary</b> | Application No.        | Applicant(s)     |
|                              | 09/889,263             | AONUMA, TAKEMI   |
|                              | Examiner<br>Irene Marx | Art Unit<br>1651 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 21 January 2004.  
 2a) This action is **FINAL**.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1 and 5-18 is/are pending in the application.  
 4a) Of the above claim(s) 10 is/are withdrawn from consideration.  
 5) Claim(s) 1,6,8,12,14 and 16 is/are allowed.  
 6) Claim(s) 5,7,9,11,13,15,17 and 18 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)          |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date, _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

The amendment filed 1/21/04 is acknowledged. Claims 1 and 5-18 are pending.

The application should be reviewed for errors.

Claim 1 should be amended to distinguish over a product of nature, i.e., language such as "a biologically pure culture" should be inserted in connection with the strain.

Claims 1, 12 and 16 are directed to an allowable product. Pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86), claims 5-9 and 11-18 containing the product or directed to the process of making or using the patentable product, previously withdrawn from consideration as a result of a restriction requirement, are now subject to being rejoined. Product claims 6, 8, 12, 14, 16 and 18 and process claims 5, 7, 9, 11, 13, 15, 17 are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Product claims 10, which is not directed to a process of making or using the patentable product, will not be rejoined. Claim 10 is a product-by-process claim which does not necessarily contain the strain of interest and constitutes a materially different composition.

Applicant has complied with deposit requirements under 35 U.S.C § 112, first paragraph in view of the averments on page 8 of the specification as amended.

#### ***Claim Rejections - 35 USC § 112***

Claims 5, 7, 9, 11, 13, 15 and 17 provide for the use of a strain of *Bacillus*, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

#### ***Claim Rejections - 35 USC § 101***

Claims 5, 7, 9, 11, 13, 15 and 17 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1651

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hairston *et al.* taken with Urano *et al.*, Cook *et al.* and Heins *et al.*

Each of Hairston *et al.*, Urano *et al.*, Cook *et al.* and Heins *et al.* discloses an antimicrobial composition comprising a *Bacillus* strain alone or in combination with other antimicrobial compositions (See, e.g., Hairston *et al.*, Examples, Urano *et al.*, Examples, Cook *et al.*, Examples, and Heins *et al.*, Examples), thus adequately demonstrating that a variety of antimicrobial compositions comprising *Bacillus* are old and well known in the art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to provide an antimicrobial composition comprising an antimicrobial strain of *Bacillus* alone or in combination with other compositions having antimicrobial activity for the expected economic and health benefit of combating or controlling various infections caused by deleterious pathogenic microorganisms.

Thus, the claimed invention as a whole was clearly *prima facie* obvious, especially in the absence of evidence to the contrary.

No claim is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irene Marx whose telephone number is (571) 272-0919. The examiner can normally be reached on M-F (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Wityshyn can be reached on (571) 272-0926. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0926.

*Irene Marx*

Irene Marx  
Primary Examiner  
Art Unit 1651